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Full Paper

A Facile Regioselective Synthesis of New Class of Cyclopent[*b*]indole dispiro heterocycles via1,3-Dipolar Cycloaddition protocol and in vitro Cytotoxic studies

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Abstract

The construction of azomethine ylides in situ from acenaphthoquinone/isatin and secondary amino acids such as sarcosine and thiaproline with cyclopent[*b*]indole dipolarophilesin refluxing dioxane and methanol afforded novel class of cyclopent[*b*]indole dispiro heterocycles *via* 1,3-dipolar cycloaddition reaction. The regio and stereochemistry of formation of the final product was concertedly assigned by proton, carbon and 2D NMR techniques. Among the synthesized dispiroheterocyclic compounds **4**&**7** are found to show better cytotoxic activity against HeLa and MCF-7 with structure activity relationship (SAR) studies.

Citing Literature

Number of times cited according to CrossRef: 6

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